

عنوان مقاله:

A Common Ground Non-Isolated Bidirectional DC-DC Converter with Wide-Voltage-Gain Range

محل انتشار:

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خلاصه مقاله:

In this paper a non-isolated bidirectional DC- DC converter is presented. In this structure three power switches are utilized and their body diodes are also is considered in analysis. Two inductors and two capacitors are also utilized as passive components. A wide voltage gain range, a low voltage stress across the power switches, and an absolute common ground, are advantages of the proposed converter. The proposed converter has simple structure which causes its control to be easy. Continues conduction mode (CCM) operation in both direction, voltage stress across the power switches and the comparisons with the other converters are discussed in this paper. Finally, simulation results are presented to validate the analysis

کلمات کلیدی:

DC-DC converter; Non-isolated Bidirectional converter; High voltage gain converter

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